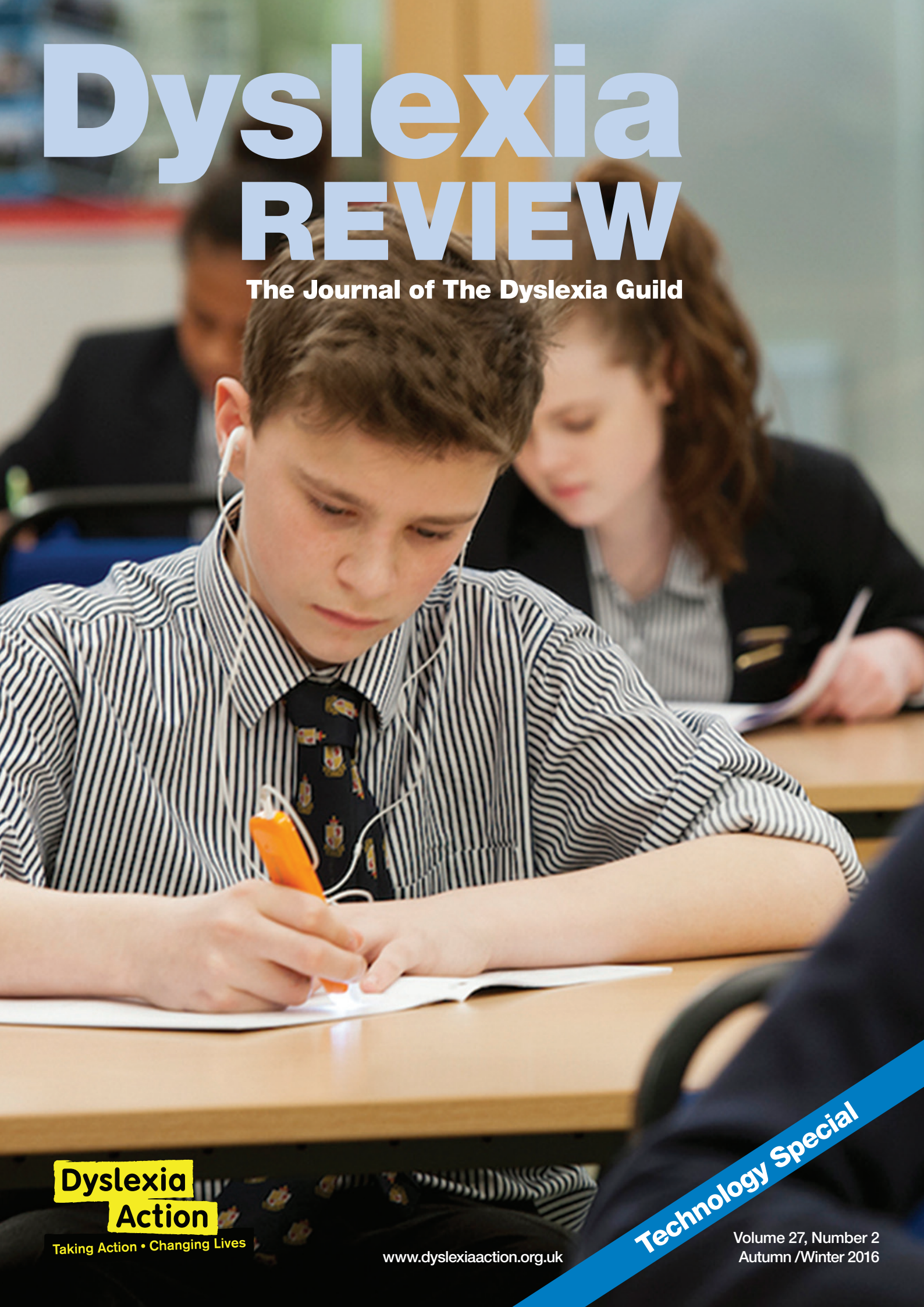
Dyslexia REVIEW

The Journal of The Dyslexia Guild



Dyslexia Action
Taking Action • Changing Lives

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Technology Special

Volume 27, Number 2
Autumn /Winter 2016

JOIN THE DYSLEXIA GUILD!

Dyslexia Action
Taking Action • Changing Lives

The Professional Body of Dyslexia Action

Who is it for?

For anyone with a general or professional interest in dyslexia. Members include teachers, SENCos, teaching assistants, FE and HE tutors, parents, assessors, and other advisory specialists.

The Aim

We aim to promote discussion, information and research as well as keeping members informed of developments in the field through publication and distribution.

Benefits

- Membership of our specialist library with access to online books and journals
- Dyslexia Review twice a year
- Conferences and events at reduced rates
- Guild Gallery electronic newsletter
- Preferential discounts on courses, suppliers and CPD events
- Assessment Practising Certificate
- Professional Indemnity Insurance at preferential rates for APC

Group membership is also available to schools, library services, publishers and other groups.

You get two copies of the Dyslexia Review and discounted rates for up to three delegates at our conference events.

For more information see our web page
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Scanning Pen in use
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Editorial

Welcome to another edition of Dyslexia Review. In this issue we are pleased to present a feature from Jennifer Donovan MDG on her current research work at UCL Institute of Education into Dynamic Assessment; a topical and thought-provoking piece that emphasises the importance of considered practice in assessment. It is timely to remind Guild members that Dyslexia Action offers a number of specialist continuing professional development (CPD) courses that will enhance practitioners' assessment skills and knowledge and lead to a Professional Practice Award. Guild members should also aim to complete at least 30 hours of CPD a year as a requirement of their professional membership. Further details of our training courses are available on the Dyslexia Action website and further information on CPD on the Guild Member's website.

Dr Lynne Duncan from Dundee University follows up her informative talk, delivered at the Guild/Infinitus Conference in June this year, with an article on Language Acquisition in relation to dyslexia. In a year when international issues, seem to have taken a backwards step it is good for us to remind researchers and practitioners that dyslexia is an international disability and not just one restricted to the English language. Dr Sally Shaywitz, an acknowledged USA expert has recently developed a dyslexia screener suitable for children in the first years of schooling and this is presented in our new assessment test feature in the Review. Dr Shaywitz is a prolific researcher and author and her screener follows on from a fascinating longitudinal survey she has conducted in the USA and which has led to a number of seminal articles on dyslexia and specific learning difficulties (SpLD).

This issue also has a special technology focus and we are very pleased to welcome contributions from a number of assistive technology specialists who have provided a wealth of useful tips and resources that can be used to ensure that new and existing technologies enable those with dyslexia/ SpLD to achieve their full potential. Study skills tutors may also have other tips and ideas that will contribute to this bank of information and a reminder here that we have a general as well as a specialist assessment forum on the Guild member's website where we look forward to hearing your views and advice.

Last but not least, we wish you all peaceful and enjoyable celebrations at the end of the year. We will be back with you for the Spring Issue of Dyslexia Review in 2017. Guild Gallery, our e-newsletter is sent out on a bi-monthly basis so to make sure you receive it, do make sure that your email address is up to date on your member record which you can access through the Guild member's website.

Kathryn Benzine
Editor

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Membership News

Jan Beechey reports on news and events for Guild members.

Directory of professional members

We are exploring ways that organisations or the public can verify who is and isn't a member of a professional body and one way of doing this is to introduce a public directory of our professional members. This will also be an audit requirement for Student Support Tutors who hold APEL Professional Membership with the Guild. We have decided to extend the offer to all those with professional membership (Associate, Member and Fellow). To get an idea of what it will look like, please see the image below.

Guild Membership Directory

Name	Surname	First Name	Membership Number	Membership Grade	Postcode	Email Address
Smith,Mary	Smith	Mary	18411	Associate	TW20 9EA	msmith@gmail.com

The only information we will be showing to the public by default will be your name, membership number and grade but we have also included the option to show further information if you wish by updating the following form: https://training.dyslexiaaction.org.uk/node/12244

This is an optional feature of your membership and you can opt out of the service by selecting "No" when asked "Do you agree to be listed in the directory".

Affiliate members will not be included in the list. If we do not have details of your professional qualifications, you will not have been allocated a membership grade so please update your details and ask us to allocate the correct grade. To UPGRADE your grade of membership here: https://training.dyslexiaaction.org.uk/node/12115

Be sure to include your CV and certificates for any SpLD qualifications.

Associate Member of the Dyslexia Guild – ADG or **ADG FE/HE** (for specialist teachers and study skills support tutors)

Member of the Dyslexia Guild – MDG (for specialist assessors or APC holders)

Fellow of the Dyslexia Guild – FDG (for those who have recognised senior experience, advanced expertise and sustained professionalism)

Details of the membership types can be found in Dyslexia Review 26(2) 2015 p.5-7 on the Guild member web portal or on our website here: http://www.dyslexiaaction.org.uk/page/membership-grades

CPD Requirements and the Dyslexia Guild

Continuing Professional Development (CPD) is the way in which professionals ensure that their specialist qualifications, skills and knowledge are regularly updated and remain relevant to the changing and developing environment in which they practice.

The Dyslexia Guild expects that all members, whatever their grade of membership, engage in regular and relevant Continuing Professional Development.

We provide more information on the Guild members web portal which includes advice on requirements, suitable courses, and a CPD Log template, all of which can be downloaded, just see the CPD tab on the Guild Home page: https://training.dyslexiaaction.org.uk/guild-members

Save the date!

Guild Conference 2017

We are pleased to announce that the **Guild Summer Conference** will be held on Wednesday **28 June 2017** in London. We will publish details of the venue, speakers, sessions and agenda in the New Year. Guild members will be able to attend at discounted and early bird rates.

Exploring Dynamic Assessment – an alternative approach to enhance our support for learners with dyslexia?

Jennifer Donovan MA, MDG reports on her current research investigating a dynamic approach to assessment which has the potential to offer detailed insights into the kind of instruction that is most likely to lead to stronger outcomes for children with dyslexia.

Introduction

In the United Kingdom, assessments for dyslexia/SpLD are undertaken by qualified specialist teacher assessors who hold Membership of the Dyslexia Guild (MDG) and/or Associate Membership of the British Dyslexia Association (AMBDA), utilising standardised assessments. The aim of this assessment procedure is to provide a 'diagnostic' decision relating to developmental dyslexia, and perhaps more importantly, to identify individual strengths and weaknesses that underpin effective support (Jones & Kindersley 2013). Standardised assessments compare the learner's performance on a range of tasks against peers of the same age. By nature, these tests are uniformly administered with strict adherence to guidelines and scripted instructions to ensure that standardisation is maintained. These normative tests are identified in the literature as static tests (Feuerstein, Feuerstein & Falik 2010).

Standardised assessments provide important comparative information however it could be argued that this is at the expense of understanding individual differences. While a specialist teacher assessment will most often incorporate information from a range of sources including observation and background information, there remains a focus on standardised testing procedures. Very often, specialist teachers express frustration that the assessments available to them do not allow a full exploration of the learner's understanding and ability (Donovan 2014).

This aim of this article is to present an alternative, evidence-based approach to standardised assessment that is designed to explore individual differences. Preliminary findings from an ongoing research project examining an interactive approach to spelling, one component of a diagnostic assessment, provides promising evidence that such a procedure may be a useful supplement to static assessments.

Dynamic Assessment

Static assessments do not allow additional interaction beyond the prescribed instructions, between the assessor and the learner. In a static procedure, the assessor presents an activity to be undertaken and then records the response, thereby producing a measure of what the learner can do at a particular moment. Such tests do not identify why a learner may be having difficulty or success with a task. As identified by Feuerstein et al. (2010), static tests do not examine approaches to a task, they only measure what the learner can or can't do at a given time.

By comparison, Dynamic Assessment (DA) is a procedure that has interaction at the centre of the assessment. The intention of DA is to understand how the individual learns best. Founded on the work of Vygotsky (1978) DA is based on the notion that in early development greater achievement is possible when a child learns through a collaborative approach (mediation), reflecting what Vygotsky termed the 'Zone of Proximal Development'. In this approach, the assessor is not primarily concerned with what the learner may or may not know, but with the process used when considering their answer. During the assessment the learner is supported to identify strategies that they might use to facilitate change. Feuerstein termed this change 'modifiability', arguing that it provides a more complete picture of the learner's potential by revealing strengths and difficulties that may not otherwise be discovered. The differences observed in performance through the interaction can then be utilized to develop an individualised intervention programme. This approach may contribute to closing the gap between assessment and intervention (Lidz 2014).

Originally developed to explore the learning potential of individuals with substantial trauma, or difficulties where conventional procedures were inappropriate, the principles of DA have since been applied more broadly but have yet to be widely used (Elliot 2003). Most recently, there has been substantial interest in the approach in the field of speech and language therapy (e.g. Hasson & Botting 2010, Law & Camilleri 2007) and second language learning (Davin, Herazo & Sagre 2016). DA has also been used in areas of literacy typically assessed by specialist teachers such as early literacy and phonemic awareness (e.g. Cunningham & Carroll 2011).

While DA can take many forms (see Grigorenko, 2009 for a detailed discussion) the defining criterion is that the learner is supported within the assessment in order to determine

their full potential. In this way, instruction and assessment are blended together, providing important information to teachers to support them in devising targeted instructional approaches. The assessor works with the learner in an interactive session to measure the individual response to a given procedure. It therefore places an emphasis on how individuals learn, in comparison to what they have learned.

In addition, DA has the potential to measure response to intervention (RTI) by gaining more insight into the factors that might predict this. The advantage of this additional information is that it may reduce time, effort and resources on interventions that prove to be ineffective (Aravena, Tijms, Snellings & van der Molen 2016). RTI is identified as being one of the criteria used in the classification of individuals with dyslexia (Rose 2009) and therefore a DA approach has the potential to support the decision-making process when drawing diagnostic conclusions and providing recommendations for support.

Dyslexia and Spelling

While there remains no universally agreed definition of developmental dyslexia the most widely accepted definition used in specialist teacher assessment is that provided by the Rose report (2009)). While the primary feature of dyslexia is identified as a weakness in accurate and fluent word reading, spelling difficulties are also well documented (e.g. Berninger, Lee, Abbot & Breznitz 2013). Difficulties in spelling can hamper writing, particularly in beginning writers, and may result in children avoiding the writing process. While difficulties in reading may be resolved with appropriate support, spelling difficulties can persist into adulthood (Rose 2009). This can have substantial implications. It has been suggested that poor spelling and inadequate writing skills contribute to around 80% of employment application rejections (McCurdy, Clure, Beck & Schmitz 2016).

Spelling is one area of assessment that may benefit from a DA approach. While there is a substantial body of evidence in the field of dyslexia relating to reading there remains less research on spelling. While partial clues may provide sufficient information for a word to be read and understood, accurate spelling is a more complex process requiring a complete knowledge of the orthographic representation of the word (Tainturier & Rapp, 2001). In an opaque orthography such as English, this can be a difficult skill to master, particularly for individuals with dyslexia.

Current assessment practices for spelling most often involve the administration of a standardised test with the answer scored as correct or incorrect. However,as discussed, these tests don't necessarily help to develop instructional strategies (Ganske, 1999). Additional information is therefore often collected to supplement these scores such as error analysis and writing samples. In a survey of specialist teachers (all members of the Dyslexia Guild) respondents were asked to identify the sources of information that they used when developing individual support programmes (Donovan 2014). Less than half of the respondents identified that that they found scores from standardised spelling tests useful. In the same survey, more than three quarters of respondents identified that they found spelling error (miscue) analysis more useful than standard scores alone.

Although error analysis is a widely used approach, miscue analysis is not an exact science. Assessors must work from intuition when trying to account for student errors and the analysis will therefore be subjective (Bissaker & Westwood, 2006). It is possible that the same kind of error may be interpreted in numerous ways by different practitioners, resulting in different recommendations (Griffiths & Stuart 2013).

Standardised assessment, error analysis and examining written performance will allow the assessor some insight in the 'what' a student can do, but not the 'how'. They provide little understanding of how the learner arrives at their spelling choice or the strategies that they bring to the task. It could be argued that it is exactly this type of information that is most useful when developing support programmes or monitoring progress.

Categorising strategy use from verbal self-report

Given the opaque nature of the English language, developing metacognitive strategies that can be successfully applied when spelling unknown words is important - good spellers approach an unknown word with the flexibility of strategy choice. Steffler and colleagues (1998) analysed the spelling strategies reported by typically developing children aged 7-10 years. They identified four categories – retrieval, phonetic (sounding out), explicit rule and analogy. A strategy was described as retrieval where the child said they 'knew' how to spell the word; the phonetic category was applied where children reported 'sounding it out'. The category of 'explicit rule' was applied where children explicitly stated a spelling rule (orthographic convention) and 'analogy' was applied when the child compared the word to other words with a similar spelling pattern. This categorisation was supported by a further study by Rittle-Johnson and Siegler (1999) who examined children's spelling strategies and identified a further two strategies that included visual checking and a combined strategy of retrieve/sound out. Visual checking was applied where the word was written down, and determining if it 'looked right'. Retrieve/sound out involved a combined strategy where part of the word could be sounded out, and the other part retrieved from memory.

As a starting point in the exploration of a DA approach to spelling, Donovan and Marshall (2016) examined the ability of 8-9 year-old children with dyslexia (Years 3 and 4) to identify the correct spelling of a presented word and self-report the strategies they used when approaching the task. This age group was identified for a number of reasons – by this age it was considered that the children would have had good exposure to teaching; they would have appropriate language to articulate their responses, and previous published studies using a similar procedure with typically developing children of a similar age provided a useful comparison. Building on the earlier studies described above, the purpose of the study was to investigate if children with dyslexia were able to verbally self-report how they approached the task of spelling both known and unknown words.

This has important implications to a DA spelling approach. If the children were unable to explain how they approached the task (for example, not replying or saying that they didn't know) then a dynamic assessment approach would not add any useful information. The results identified that children

with dyslexia were able to explain how they approached the spelling task in the same way as typically developing children of the same age, suggesting that a dynamic approach to spelling was a possibility. Analysis of the data revealed that the children with dyslexia used the same range of strategies identified in previous studies. Because of the variation in the target words used in this study, two additional categories were included; retrieval using a specific strategy (e.g. mnemonics) and semantic knowledge (e.g. distinguishing between the spelling of homophones).

While children with dyslexia used the same range of strategies as their typically developing peers they were more likely to use them in isolation. That is, typically developing children were often able to articulate a number of different strategies that they could use when spelling a particular word. By comparison, the children with dyslexia tended to rely on a phonological strategy (i.e. sounding out) even for irregular words. These children were therefore not always successful- they could identify the sounds but showed difficulty in recalling the exact letters and/or sequence of letters. This supports the findings of Fayol, Zorman & Lété, (2009) that poor spellers have difficulties remembering word specific information. One explanation for the emphasis on sounding out (phonetic strategy) may be the focus on quality phonics teaching in UK schools in recent years (Walker, Bartlett, Betts, Sainsbury & Mehta, 2013). It is possible that this has influenced the strategy choice. The data suggests however that while typically developing children are able to use this strategy as appropriate, and combine this with other strategies, children in the dyslexia group are more likely to persist with sounding out, even when unsuccessful, and appear to have a narrower choice of strategies available to them.

The next step

Having established that children with dyslexia are able to report the spelling strategies they use, Donovan and colleagues have developed a spelling procedure incorporating a dynamic assessment approach. The procedure has recently been piloted in a number of primary schools to explore if the information collected provides additional information for support beyond that obtained from standardised assessment. A positive result will give some support to using an interactive approach to assessment on a wider basis. Data is currently being collated. A final step in the study will be to pilot the procedure with a number of specialist teachers.

One of the criticisms of DA as an explanation of why it has not received more widespread support, is that the procedure is time-consuming (although it could be argued that more time spent in developing an appropriate intervention will save time overall). However, in order to partially address this issue, the author and another UCL colleague, Rosanne Esposito, are currently analysing the data from a study in six inner London schools where a variation of the procedure has been used with small groups and as a whole class activity. Details of both studies should be available in 2017.

Conclusion

As argued by Lidz (2014) It '*is not only helpful but also necessary to include Dynamic Assessment in our repertory as a relevant source for information …….. Dynamic Assessment provides unique information which allows us to address perhaps the most important portion of our consultations and reports: our recommendations for instruction and intervention.*' p 298.

A dynamic approach to assessment such as that explored by this research has the potential to offer detailed insights into the kind of instruction that is most likely to lead to stronger outcomes for children with dyslexia. As such, it has the potential to move beyond the assessment of spelling to wider areas of literacy assessment, to inform our understanding of not just what an individual knows, but the understanding and strategies they bring to the task. As an additional approach in the specialist assessor's toolkit, dynamic assessment may provide important information to enhance our understanding of how individuals can best be supported.

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Language Acquisition in Relation to Dyslexia: A cross-linguistic perspective

Dr Lynne Duncan, Senior Lecturer in the School of Psychology at Dundee University presents research which considers the predictors of reading progress across alphabetic systems and the implications for children with dyslexia.

Background

A child's reading development is shaped by the language that child happens to speak and read. In alphabetic spelling systems, the links between the sounds in spoken words and the symbols of the written language need to be formed. To do this effectively, children depend on having typical sensitivity to spoken language and on being able to learn to manipulate speech sounds in new and more analytic ways that enable spelling-to-sound conversion in reading. This idea is captured best in Ziegler and Goswami's (2005) model of reading development, which is summarised in Figure 1.

Figure 1. Factors influencing early reading development (adapted from Ziegler & Goswami (2005)

Early sensitivity to spoken language

From birth, babies tune in to the sounds that they can hear being spoken all around them. Infants start to lose sensitivity to sound distinctions that are not important in their own language from around 6 months of age, while familiarity with the nature of their own language continues to increase. Another aspect of spoken language that becomes important is speech rhythm, which can be thought of as the musicality of a language. Infants use cues related to speech rhythm from around 8 months of age to help them segment individual words from the fluent speech produced by adults (Nazzi et al, 1998).

Speech rhythm has proved more difficult than expected to quantify despite the subjective impression of differences in the rhythms of different languages (Nolan & Jeon, 2014). It seems likely that several phonological cues may contribute to the perceived rhythm of a language. English is often labelled a stress-timed speech rhythm since where the stress falls in a word determines its meaning (e.g. perfect vs. perfect) and stress produces a characteristic pattern of alternating strong and weak syllables due to the reduction of vowels in unstressed syllables (e.g. contrast the pronunciation of 'e' in the examples above). This is not true of French which is often classified as having a syllable-timed rhythm where syllables have a particular prominence and vowels are pronounced more fully. The use of these speech rhythms for early speech segmentation appears likely to create cross-linguistic variation in the spoken language systems of speakers of different languages. Individual differences in sensitivity to speech rhythm may lead to further variation.

Relevance of spoken language to reading and dyslexia

Close links exist between preschool language and later word reading. In a meta-analytic review of studies of children at family risk of dyslexia, early language, phonological awareness, RAN and letter knowledge emerge as longitudinal predictors of later word reading difficulties (Snowling & Melby-Lervåg, 2016). In other work, sensitivity to rhythm in speech has also been associated with reading ability (Goswami et al, 2002).

These findings fit with theories of developmental dyslexia that emphasise a language component (Vellutino et al, 2004), and although not the only possible explanation of dyslexic difficulties, this is the focus of the present article. The findings also fit with what is known about brain function in developmental dyslexia. A recent meta-analysis of neuroimaging data in dyslexia confirmed poor activation of the left occipito-temporal cortex which plays a role in phonological skills and spelling-to-sound conversion in reading and reading-related tasks (Paulesu et al, 2014).

What clues can be gained from looking at reading development in different languages?

Awareness of sound

In our study, children were followed during the first year of reading instruction in Belgium (French), Greece, Iceland, Portugal, Spain and the UK (Duncan et al, 2013). French and Spanish have syllable-timed speech rhythm, whereas English has stress-timed rhythm. Greek, Icelandic and Portuguese are thought to lie somewhere in between these two endpoints of the continuum.

While the average age of most language groups at the beginning of the study ranged between 6;2 and 6;6, the

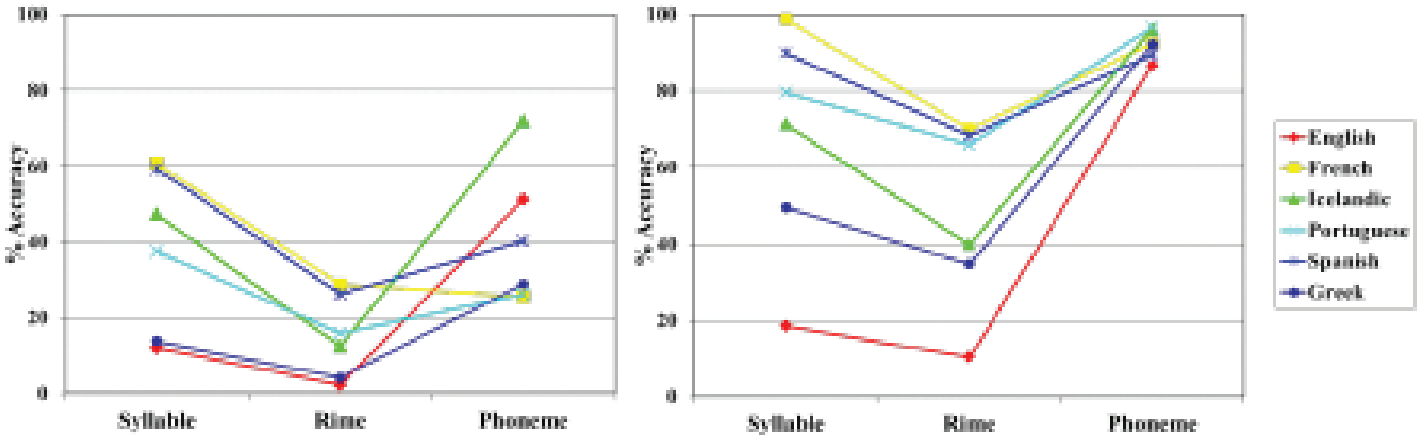

Figure 2. Graphs showing group mean % accuracy at common unit identification for syllables, rimes and phoneme at the beginning (left) and end (right) of the first year of learning to read.

UK children were a year younger with an average age of 5;4. At the beginning of the year, children knew an average of 12 letters but could not yet read any words. All were receiving phonics reading instruction

In phonological awareness tasks, we found different patterns of performance according to whether children matched word-pairs on the basis of their overall similarity in sound or identified the particular sound shared by a word-pair. The former task was much more influenced simply by the size of the shared sound with word-pairs sharing larger sounds being easier to match. The latter task, the Common Unit Identification task, shows a closer association with reading progress (Duncan et al, 1997, 2000) and is presented here. In this version, children were asked ''Which bit sounds the same in ..?'' and they heard a spoken disyllabic word-pair. The first syllables of the words contained a shared syllable (e.g. window-winter), a shared rime (e.g. panther-bandage) or a shared phoneme (e.g. penguin-padlock). Disyllabic words were used since monosyllables are not so typical of languages other than English and it is important to understand children's awareness of sound in multisyllabic as well as monosyllabic words.

The results in Figure 2 argue against a universal large-to-small sequence in phonological awareness when identification of segments of sound is required:

At the beginning of the year, phonemes were easier than syllables for English, Greek and Icelandic and harder than syllables for French and Spanish. Whether or not these early phoneme skills might be linked to speech rhythm is unclear. Rime identification was uniformly poor. On syllable identification, Spanish and French were consistently most accurate with English and Greek least accurate, which ties in with what we know about speech rhythm.

At the end of the year, phoneme identification was at ceiling in every language. Rimes were less accurate than syllables in Greek, Portuguese, Spanish and French. Syllables were most accurate in Spanish and French and least accurate in English, once again consistent with speech rhythm.

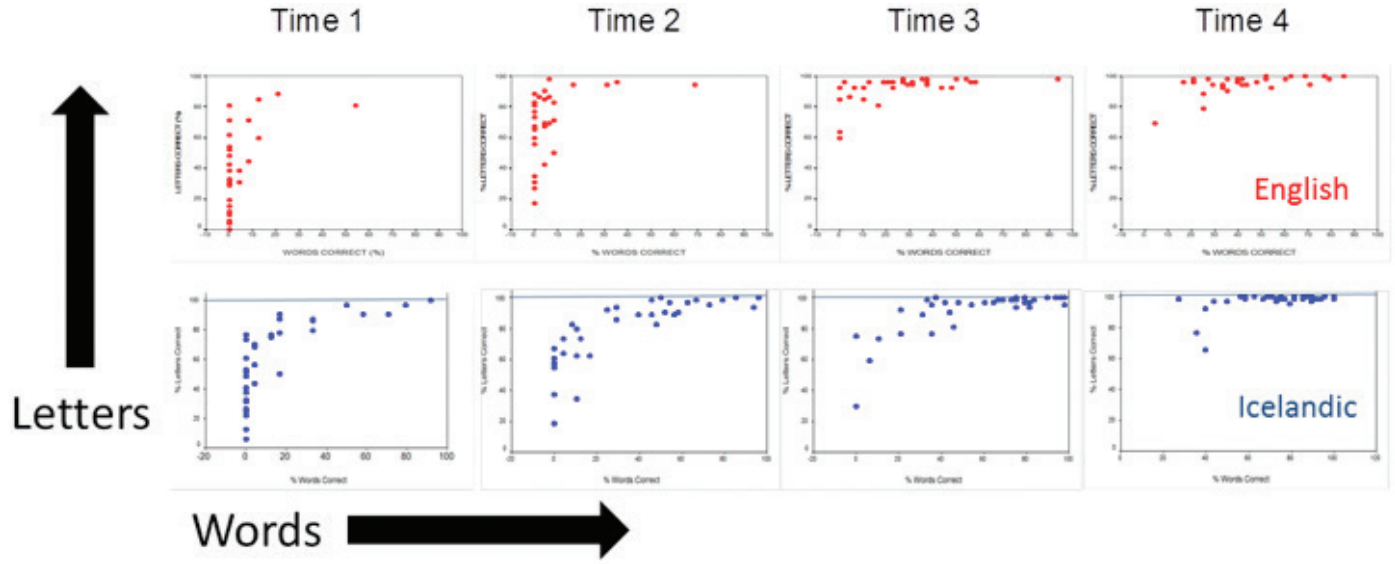

Figure 3. Scatterplot with points representing individual children showing increasing accuracy at letter knowledge in relation to word reading skill across four time points during the first year of schooling in English (upper graphs) and Icelandic (lower graphs).

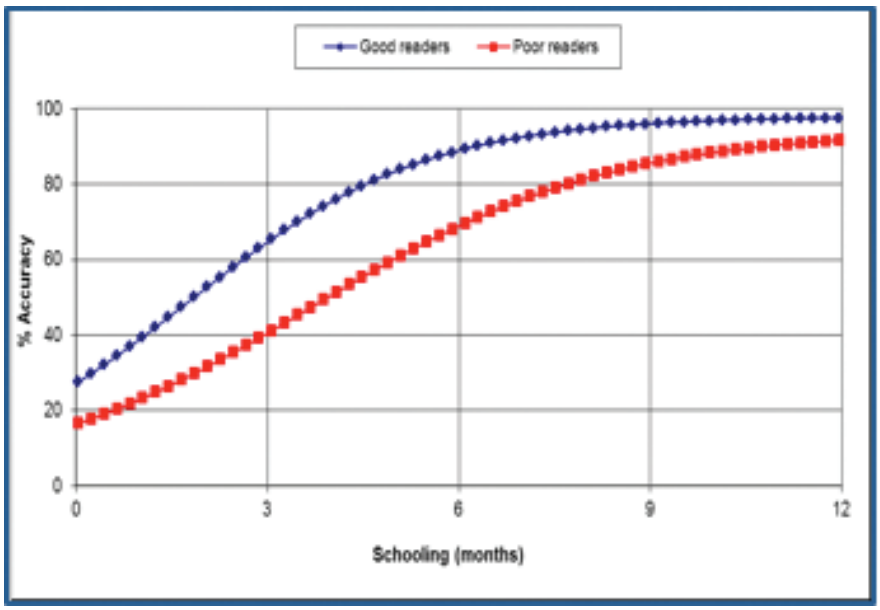

Figure 4. Development of letter knowledge (% accuracy) during the first year of schooling for good and poor readers of English.

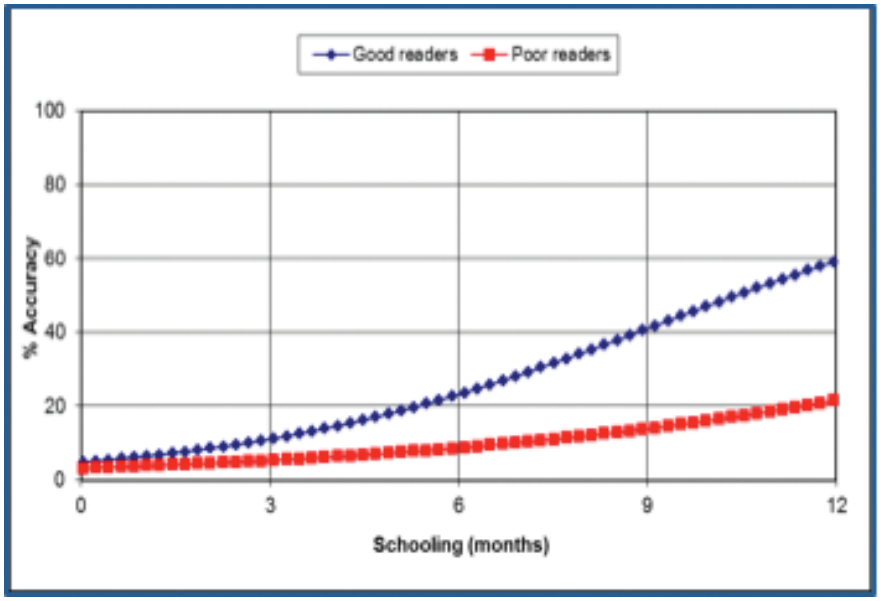

Figure 5. Development of word reading (% accuracy) during the first year of schooling for good and poor readers of English.

Therefore, our results show cross-linguistic differences in awareness of syllables, which persist across the year and appear to be associated with the influence of speech rhythm. This underlines the possibility that availability of sound may differ between spoken languages. Nevertheless, a uniformly excellent level of phoneme awareness was apparent in all languages by the end of the year.

Instruction effects

The role of instruction method in promoting phonological development was examined experimentally by the Belgian team, who compared phonics instruction with whole-word methods that adopted a look-and-say approach to reading by encouraging children to practice whole-word identification using techniques such as flash cards.

Whole-word instruction did not improve common unit identification during the first year of instruction despite increased letter knowledge among this group. In contrast, the phonics group showed an advantage in letter knowledge and phonological awareness, especially phoneme identification by the end of the year. This outcome provided evidence that the ceiling effects across languages in phoneme identification were likely due to the input from phonics exercises.

Linking sound and spelling

The development of spelling-sound correspondence knowledge is helped by phonics instruction and it seems that there is an early phase of establishing letter knowledge before that knowledge can be used in word reading. Figure 3 illustrates this process in English and Icelandic. The time series of graphs during the first year of reading confirms that letter knowledge has to increase first to a level of around 80% accuracy before word reading starts to develop (Duncan & Seymour, 2000). The process is similar in both languages but slightly accelerated in Icelandic.

However, languages differ in how easy it is to convert the spelling of words into sounds or vice versa. This

is known as the orthographic depth of the language. English-speaking children face one of the greatest challenges in terms of how inconsistent spelling-sound correspondences are. This contrasts with Greek, Icelandic and Spanish where the correspondences are much more regular, and French and Portuguese lie somewhere in the middle. It has been suggested that the degree of consistency might influence the acquisition of phoneme awareness. Our study showed no evidence of this since at the beginning of the year English and Iceland were more accurate in phoneme awareness than French, Greek and Portuguese, and, by the end of the year, all languages showed ceiling effects in phoneme awareness.

Where orthographic depth is more apparent is in the difference in reading accuracy between simple and complex words within each language. English and Icelandic have the added complication of syllable structure being much more complex with many initial and final consonant clusters. Altogether, this complexity effect can be quantified according to the decrease in reading accuracy for complex words: Spanish 5%, Greek 6%, Portuguese 12%, French 14%, Icelandic, 17% and English 36%.

Implications for reading difficulties

Looking at the English-speaking poor readers within our sample, some of whom may later be identified as developmental dyslexics, we found that syllable and rime availability did not discriminate the groups but phoneme identification skills were impaired among the poor readers early on in schooling. Of interest, for future research is how this might link to the early English language system and features such as speech rhythm sensitivity. Figure 4 below shows that a slight delay in the acquisition of letter knowledge meant that good and poor readers achieved the critical level of 80% accuracy at different points, after 5 and 8 months of schooling, respectively. The implications of this delay can be seen in the different rates of emergence of word reading in Figure 5.The slower rate among poor readers is likely also to reflect a component for the complexity effect in English, which is likely to further disadvantage reading accuracy among these children.

Conclusion

Cross-linguistic comparisons reveal important differences as a result of the nature of the spoken and written language that children encounter. Orthographic depth (consistency) creates different patterns of decoding and reading progress, which lead to the need for different assessment methods in less consistent spelling systems like English (accuracy-based) compared to those used in more consistent systems like Spanish (fluency-based). Nevertheless, important similarities are also evident. As Hulme & Snowling (2016) point out, the predictors of reading progress are similar across alphabetic systems (preschool language, phonological awareness, RAN and letter knowledge). Our results confirm this and show a similar response to phonics instruction and dependence of early reading on letter knowledge across the languages investigated.

Acknowledgements

We are especially grateful to the pupils, parents and staff who participated in our research. This work was supported by grants from the ESRC (R000239151), ESRC/ESF EUROCORES (R000223737), The Leverhulme Trust (F/00143/B) and 4 other European national research councils.

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Assessment in Focus:
The Shaywitz DyslexiaScreen

Developed by Dr Sally Shaywitz, following a longitudinal study conducted over thirty years, the DyslexiaScreen has been developed in the USA and is now available in the UK, enabling teachers to make an early identification of children with dyslexia.

Dr Sally Shaywitz is a physician scientist and by training a developmental paediatrician with a passion for a better understanding of the science of dyslexia. She is a recognised US authority on Dyslexia. Shaywitz notes that in the USA and worldwide there is a 'reading crisis'[1] with science telling us that dyslexia may be at the root of these difficulties.

"Right now in (USA) public schools, screening for and diagnosing dyslexia is practically non-existent, especially in low-income communities. If children with dyslexia are not identified, they will never receive evidence-based interventions and accommodations that will change their lives for the better."

Shaywitz notes that there is an answer; children can be identified and helped at an early stage. The Shaywitz DyslexiaScreen[2] has been designed specifically to help teachers identify children at risk of literacy difficulties. Developed in the USA by Dr Shaywitz, the assessment is for use with pupils experiencing academic difficulties but can also be used to screen a whole class. It is an evidence-based assessment that helps teachers to identify children at risk of dyslexia and is based on teachers' keen observations, asking and ranking the answers to a short series of questions. Shaywitz conducted a longitudinal study to determine which questions were most likely to predict dyslexia in children several years later.

The screening test is published by Pearson in the USA and the UK and emphasises phonological, linguistic, and academic performance based on teacher observations. Teachers can complete the Shaywitz DyslexiaScreen for a student in less than five minutes using an online form. Digital administration and scoring in Q-global provide evaluators with immediate results and reporting capabilities for individuals and groups of children. Pearson note that the particular features of this dyslexia screening tool are that it is efficient, reliable, and user-friendly and only takes a couple of minutes per child as opposed to other more time-consuming measures.

The classification accuracy data indicate moderately high sensitivity and specificity for Forms 1 and 2. Clinical validity data indicate that the Shaywitz DyslexiaScreen correctly classified 71% of US kindergarten children (UK 5-6 year olds) and 80% of those in US first grade (UK 6-7 year olds)[§].

Image of Sally Shaywitz is taken from '*The Big Picture*' courtesy of Shadow Creek Films

Features and benefits of the Shaywitz DyslexiaScreen:

- Quickly and easily identifies Dyslexia risk
- Developed specifically for young children
- Administration takes less than five minutes per child
- Allows teachers to screen individuals or groups
- Easy to use, teacher-friendly rating scale
- Digital administration, scoring, and reporting via *Q-global*®[3]
- Web-based administration, scoring and reporting

The Shaywitz DyslexiaScreen is only available using Q-Global Pearson's secure web-based scoring and reporting platform, accessible from any computer connected to the Internet. Additional information regarding Q-global technical requirements can be found on the System Requirements page[4] as well as a page of Frequently Asked Questions (FAQs).[5] The Shaywitz DyslexiaScreen offers two forms:

- Form 1 is for teachers of children age 5 to 6 years, 11 months and consists of 10 items.
- Form 2 is for teachers of children age 6 years to 7 years, 11 months and consists of 12 items.

A teacher completing Shaywitz DyslexiaScreen Form 1 or Form 2 is expected to rate statements regarding a student's language and academic behaviours based on how frequently

[§]http://www.fulbright.org.uk/study-in-the-usa/school-study/us-school-system

he or she demonstrates each behaviour. The results of these ratings generate two reports:

- An Individual Report that includes the child's standard demographic information, risk level, and an interpretive statement.
- A Group Report that includes all children's raw scores and risk levels listed by examinee ID or Last Name.

The results of the Shaywitz DyslexiaScreen for a particular child include a simple classification of *At risk for dyslexia* or *Not at risk for dyslexia*. This classification makes it easy for teachers and other professionals to interpret and communicate results.

Background to development of the Screener

The Shaywitz DyslexiaScreen was normed as part of the *Connecticut Longitudinal Study*[6] that Dr. Shaywitz began in 1983; she continues to follow 80% of the individuals included in this study.

As explained in an article by Ferrer et al. (2015)[7], the purpose of the *Connecticut Longitudinal Study* was to determine if cognitive and academic differences are evident between children with dyslexia and their typically developing peers as early as first grade and if so, whether the trajectory of these differences increases or decreases from Grades 1 through 12 (USA).

The research looked at a wide range of factors including the prevalence of reading disability in boys and girls (Shaywitz et al 1990)[8]; evidence that firmly indicated that the earlier intervention is put in place the more positive the outcomes will be (Shaywitz et al 1995) [9] notable persistence in adolescence (1999) [10] and a developmental uncoupling between cognition and reading in those with dyslexia (Ferrer et al 2010).[11]

The sample of students was followed prospectively and longitudinally from school entry into early adulthood for the purpose of studying the development of reading, learning, and attention. Results indicated that the achievement gap between students with and without dyslexia is evident in first grade in the USA and persists into adolescence, providing a strong impetus for identifying young children at risk for dyslexia and beginning intervention programs as early as possible.

Sally E. Shaywitz, M.D.

is the Audrey G. Ratner Professor in Learning Development at the Yale University School of Medicine, USA and is the Co-Director of the Yale Center for Dyslexia and Creativity USA. She has devoted her career to better understanding and helping children and adults with dyslexia. Her research provides the basic framework: the conceptual model, epidemiology, and neurobiology for the scientific study of dyslexia. Together with her husband, Dr. Bennett Shaywitz, a child neurologist, she originated and championed the "Sea of Strengths"[12] model of dyslexia which emphasises a sea of strengths of higher critical thinking and creativity surrounding the encapsulated weakness found in children and adults with dyslexia. Dr Sally Shaywitz is the author of over 200 scientific articles, chapters and books and is an elected member of the USA Institute of Medicine of the National Academy of Sciences. She has received numerous honours for her work in advancing the scientific understanding of reading and dyslexia. Sally was featured in the film *The Big Picture: Rethinking Dyslexia*[13] (Redford 2012) featured in Dyslexia Review Vol 23 No 3 Autumn 2012.

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Integrating Study Skills and Assistive Technology

Robert McLaren and Jamie Crabb from Diversity and Ability (DnA), explain why assistive technology can't be separated from study skills, or everyday tasks as it pervades all aspects of life, including modern higher education.

Diversity and Ability (DnA)[1] strongly champion the importance of the integration of Assistive Technolgy (AT) within specialist one-to-one study skills support for students with Specific Learning Differences (SpLDs). Since the 1990s, Higher Education students with dyslexia have had access to AT tools and programs through the **Disabled Students' Allowance** (DSA)[2]; technological tools that can be used to support study strategies. It would be arbitrary to say that study skills is about developing only those strategies that make use of low-tech tools such as pen and paper. However, more often than not, AT is not integrated within specialist one-to-one study skills tutorials. Yet this lack of integration of technology and study skills is becoming more and more untenable. In the modern university, the programs traditionally thought of as AT are just one part of the study technology students engage with.

Elliot is a student with dyslexia who is studying engineering. In this article we use Elliot's experience as a case study example of how study strategies, mobile and DSA funded assistive technology can and should be integrated.

Personal technology is assistive technology

"I'm not very good with computers" says Elliot, when his tutor starts a conversation about one of his AT programs. But it turns out he organises his study group on WhatsApp[3] would struggle to make it to lectures without reminders on his iPhone[4] and completes all his research online! It's true that Elliot might find learning some of the processes involved in using his DSA assistive technology difficult to pick up. But Elliot is not starting from scratch with AT - he comes to his studies with his own mobile technology and some metacognitive awareness of how to apply it to this new context. The apps on his phone were not developed with students with dyslexia in mind and many of them are not even designed for study. But it seemed natural to Elliot to re-appropriate these apps to support study tasks as he started university. This has implications for both study skills tuition and assistive technology training:

- **Metacognition must include a discussion of technology.** Zull (2011) recognises how metacognition "lies at the heart of all learning...self-knowledge, awareness of how and why we think as we do, and the ability to adapt and learn, are critical to our survival as individuals". Supporting students to become metacognitive learners has long been a key part of study skills tuition. Now that technology plays such a large role in study, tutors can't facilitate metacognitive skills without opening a discussion about how a student uses technology. For Elliot, part of understanding the way he works and learns involves reflecting on his current use of technology. To help Elliot understand why his research often lacks focus, he and his study skills tutor discuss how he is using internet browser tabs. Elliot overloads his browser with tabs because he doesn't want to miss anything. But he ends up just 'collecting tabs' rather than reading in a focused way. Elliot and his tutor explore this difficulty and recognise how it relates to Elliot's study anxiety and working memory difficulties. At the same time, they also work on a strategy using **bookmarks**[5] so he can save and close all his tabs when he gets overwhelmed, and then only reopen the important ones.
- **DSA Assistive technology builds on personal technology**. The workflows Elliot is developing in his DSA AT training sessions involve both AT *and* apps which are not necessarily designed for students with SpLDs in mind. For instance, Elliot takes lab notes using **Google Keep**[6], a notetaking app on his phone. When learning to use Inspiration Mind Maps as a research and planning tool, Elliot and his DSA AT trainer explore hyperlinking his Keep notes to his inspiration[7] map. Elliot's use of his DSA AT is most successful when it integrates and compliments his existing workflow and apps.

Integrating low-tech and high-tech

Paper is still a fantastic tool - the good news is that new technology can complement it instead of pushing us towards the keyboard. Elliot likes to draw diagrams in a notebook when he is studying from his textbook. In the past, Elliot would have had to either leave the strategy in its low-tech form or give it up for a high-tech alternative - but now **integrative workflows are the norm**:

- **Low-tech to high-tech**. Elliot gets his lecture slides ahead of time and prepares for the lecture by hand-drawing his own versions of the diagrams. This low-tech kinaesthetic strategy helps him to prepare for the lecture but he has learnt to integrate a high-tech element as well. Supported by his study skills tutor, Elliot explores how to scan the diagrams with a scanner app **OfficeLens**[8] and import the scanned image into his DSA note taking software which he uses to record his lectures (**Audio Notetaker**[9]). Now Elliot can use

the diagrams he has drawn as a framework to help him make further notes during the lecture. He builds his lecture notes from his diagrams, using lecture audio, typed text and digital annotation.

- **High-tech to low-tech**. Elliot recognises that it is helpful for him to turn off his phone and computer during revision periods so that he can avoid getting distracted. But that doesn't mean he can't get the best out of his revision app **StudyBlue**[10]. Elliot uses the app to make flashcards, prints them from the app, and then turns off his phone. He can also make wall posters from his digital mind maps.

Using low-tech strategies is not a reason to avoid high-tech ones. Innovations such as scanning apps allow students to integrate the use of pen and paper in addition to computers within their workflow.

Understanding University Technology

One kind of technology that is often unfamiliar to students when entering university is the Virtual Learning Environment (VLE). Almost all courses have one - and students need to make it work for them, or they may miss key pieces of information such as assignment deadlines and useful resources such as reading materials. Here are some of the things Elliot is learning to do with his VLE:

- **Manage the flow of housekeeping information.** Elliot gets emails to his university Outlook.com address (accessed via his VLE). He tends to miss important emails because he is overwhelmed by the volume of emails, many of which are less important (e.g. adverts for Student Union events). With his AT trainer Elliot explores how to set up sorting rules for Outlook, so he can divert unimportant emails to allow him to prioritise the essential ones.
- **Use guidance material.** Course handbooks are often long and technical, comprising a description of the task, learning outcomes and grade boundary descriptions. Elliot finds reading his handbook overwhelming. To help him navigate and chunk the reading in his handbook, his study skills tutor shows him how to display **a sidebar in MS Word**[11] displaying all the document headings and subheadings. Elliot uses the comments feature of Word to record any questions he has about the guidance; he then emails the document to his academic tutor who responds to his questions.
- **Handing in work.** Malfunctioning printers used to cause deadline-day panic - now students face the complexities of Turnitin. Turnitin is the widely used assignment submission portal and plagiarism checker (built into many VLEs). Elliot explores the process with his study skills tutor a week before his hand in as **a practice submission**[12] for hand-in day. This allows him to check his early draft using the plagiarism checker and ensure he fully understands the process of submission so that he can avoid possible last minute hiccups.

Assistive technology can't be separated from study skills, or everyday tasks. This is not because every strategy uses specialist AT but because technology, of one sort or another, pervades all aspects of life, including modern Higher Education. University courses assume a level of both access to, and proficiency with, computers and AT. Students' ability to succeed depends on developing their own ways of integrating technology within their study workflow.

Diversity and Ability (DnA)

is a purpose beyond profit social enterprise working towards removing deficit models surrounding neurodiversity and disablement. We celebrate diversity through adversity and we measure our success against our impact on society. We are end-user led so our support is empathetic and delivered from a place of mutual understanding. We believe that peer-to-peer support, respect, and empathy - delivered by end-users who share a lived experience with their trainees - can fundamentally change the way the DSA is used and perceived.

Robert McLaren is an assistive technology trainer and study skills tutor. He is editor of the DnA Resources Webpage and contributed to *Study Skills for Students with Dyslexia*. Robert is also the Assistive Technology Officer for ADSHE and works with other groups in the sector including the BCS Digital Accessibility Specialist Group and the Assistive Technology Network. He writes here as a member of the DnA team.

Jamie Crabb has over 10 years' experience working in the education sector. His early work included education project coordinator for the Metropolitan Police Safer Schools Project initiative in Haringey, and lecturer/tutor in Applied Theatre at the Royal Central School of Speech and Drama. More recently his work focuses on disability, and specific learning differences (SpLDs) support, assistive technology training and diagnostic assessment for students in higher education. He is completing the final years of training in Integrative Counselling and Psychotherapy at the Minster Centre. Jamie heads up DnA's Training and Innovations team developing their innovative CPD provision on inclusive learning, wellbeing and Assistive Technology. He co-edited the third edition of *Study Skills for Students with Dyslexia (Support for Specific Learning Differences)* for SAGE publications and has co-authored articles for ADSHE, PATOSS, and NADP. Jamie embraces a neurodiverse and integrative approach to teaching, learning, and wellbeing. He believes students should drive the learning process and develop awareness of how they learn best in order to succeed.

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Accredited Short Courses

Dyslexia Action
Taking Action • Changing Lives
Training and Professional Development

Assistive Technologies to Support Struggling Readers and Writers

(DACPD88)

This unit explores the key role assistive technology can, and should, have in today's learning environments. A range of resources are described and evaluated including many which are available easily online. The course is practical in nature, seeking to equip participants with skills including the structuring of word documents to make reading more accessible, and in the production of text to speech audio files. It is intended that participants will gain a confidence and basic competence in using these practices, understand how they facilitate learning and be able to implement them in their setting.

Supporting Study Skills in Learners with Dyslexia

(DACPD87)

This Unit begins with a consideration of what we mean by study skills. It goes on to explore the barriers to learning that can impede the development of study skills in learners with dyslexia and the teaching methods that can improve their access to learning.

Supporting Study Skills in Adults with Dyslexia

(DACPD92)

This Unit begins with a consideration of what we mean by study skills. It goes on to explore the barriers to learning that can impede the development of study skills in adults with dyslexia and the methods that can improve their access to learning.

All of our short courses are online, tutor lead, a maximum of 30 hours over six weeks and are accredited by The CPD Standards Office.

Email: cpdmail@dyslexiaaction.org.uk
Tel: + 44 (0)1784 222304
www.dyslexiaaction.org.uk/educators

These courses are accredited by:

The CPD Standards Office
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Accredited cpd Activity

Innovations in technology that are enabling struggling readers to be independent

Jack Churchill from Scanning Pens Ltd considers how this new technology benefits those with reading difficulties and provides an allowable resource for access arrangements.

Image courtesy of Dom Mowbray of 360 CLICK LTD

Most people would agree that for children in the education system, the most important and most stressful time at school is exam time. What is key for students with dyslexia (and their teachers) is to remember that nearly all exams are not testing reading ability but knowledge of a subject. Therefore, it is absolutely crucial for struggling readers to be given the necessary support to read the questions. If you can't read the question,how can you possibly answer it!

As a poor reader at school, I was fortunate enough to be assessed for dyslexia. The main outcome of this meant I was allowed an extra twenty minutes per hour of exam. This made a huge difference to me passing my seven GCSE's and three A-levels and it has meant the subject of dyslexia has always been of interest to me.

Two decades on from leaving school, I now find myself attending major education and dyslexia conferences in the UK and abroad as part of the day to day marketing of the company I co-founded exactly thirteen years ago, Scanning Pens Ltd. Over this time, we have worked with different manufacturers of portable scanners including WizCom Technologies from Israel, Planon from Canada and C-Pen from Sweden. The technology we supply assists people with reading, data capture and translating.

Much of this technology was clever and state of the art thirteen years ago, however since then little development occurred from the manufacturers and so our business

struggled. However, two key elements have now transformed the business into good shape, so much so that our sales have been more than doubling every year since 2014.

The first big development was gaining approval from the Joint Council for Qualifications (JCQ) for pen scanners to be used in exams. This was followed by us working with C-Pen to develop new state of the art pens scanners that have built-in cameras rather than scanners and that speak with a really good digital voice.

More than 50,000 children a year in the UK have help with reading the exam questions in their GCSE's and A-Levels. Typically, these students are put in a separate room to their peers with a human reader. The advent of the C-Pen Exam Reader now means students who struggle with reading can be back in the main exam hall with headphones plugged in hearing any words or lines of text read aloud. The arrangement is 'centre delegated', so a school can allow anyone who struggles with reading to use the pen, as long as it is part of their normal way of working. So as well as helping people who have Access Arrangements, this pen can now be used by people who didn't qualify for Access Arrangements and for people who have English as an additional language. The device can also be used in Cambridge International Exams such as the iGCSE and in Scottish Qualifications Authority exams and the International Baccalaureate are expected to make an announcement this winter.

It was vital when developing the C-Pen Exam Reader to take into account the exam board criteria that there should be no dictionary, no storage function and finally that it must stand out clearly in a busy exam hall as the approved one, hence the bright orange colour! The pen's modern design means the device is half the size of previous portable pen scanners and at 50g is half the weight. The pen has a LCD display, speaker and seven control buttons. There are two ports – a headphone port and micro usb for charging. As the pen is rolled across a word or line of text, a white light is emitted from the nose of the pen which works like a yellow highlighter in showing the user where the pen is moving. This means a student keeps their concentration on the page they're reading and they don't get distracted. Typically, a person who struggles with reading on their own and gets stuck on a word(s) would just skip out the word or guess it. Both skipping and guessing a word starts the process of devaluing the text and setting the person up to fail the task that has been set. By allowing the student to read on their own, it is engaging them in their study.

In a nutshell the C-Pen Exam Reader helps a school relieve the pressures of resourcing both exams and every day class room support. But most importantly a student equipped with a C-Pen is able to work and learn on their own. It increases independence, confidence and raises self-esteem, which ultimately sets them up for the real world where they'll have to manage without the continual support of another human being.

The Exam Reader has been used in the classroom and exam hall for one year, but is already having an enormous impact. Suzanne Hunt, Examinations Manager from the Henry Box School and Sixth Form commented: "She thought the pen was excellent and said she would prefer to use this than having a person read to her!" Whilst Nicole Dempsey, individual needs co-ordinator from Dixons Trinity Academy informed us that they "noticed a calmer and more positive attitude in exams and also increased grades/better results - sometimes drastically so - more in line with what we know the students are capable of".

I'm very excited to report that the C-Pen Exam Reader has been shortlisted for the prestigious BETT Awards 2017 in two categories. The pens are £166.67ex vat and available in two formats, the C-Pen Reader which includes reading aloud, Collins dictionary, data capture and voice recorder, whilst the C-Pen Exam Reader only has the reading aloud functionality.Scanning Pens Ltd offers schools a 30 day free trial so they can effectively try before they buy.

For further info please visit: www.examreader.com or www.readerpen.com

Scanning Pens Case Study

Jeanette Knowles, SENDCo from Wreake Valley Academy talks about Scanning Pens

What kind of school do you work in?
We are an 11-18 mixed gender, secondary school in Leicestershire.

Did you trial the C-Pen Exam Reader initially, if so, what "review process" did you follow and what conclusions did you draw?

We trialed the C-Pen Exam Reader with a number of students and obtained feedback from the students themselves and from the teaching assistants.We also measured the change in the students'ability to complete assessments and classwork independently.

What do you most like about the C-Pen Exam Reader?

It's ease of use, exam approval and the light that clearly shows what text is being captured.

Please describe how you are using the C-Pen Exam Reader and how it has affected your students?

We use it with SEN/EAL students to access curriculum text and during exams. They are already showing improved confidence and independence. The students who piloted it have also encouraged other students to use them and clearly see the benefits of them.

How likely are you to recommend the C-Pen Exam Reader to others?

Definitely.

The iPad – technology for learning

Technology can assist those with a range of challenges in the classroom, but should allow all students to access and enhance learning. What can an iPad offer? Mike Watkinson from Jigsaw24 puts Dyslexia Review readers in the picture.

To introduce myself, I am currently working as an Apple Education Trainer for Jigsaw24, who are the leading Apple Solutions Expert for Education in the UK. Previously I have worked as a musician and educator, principally in the further education space.

For some time now technology has provided us with many wonderful and usually bespoke solutions for a range of challenges to learning that our students face in their classrooms. These clever pieces of kit often target one specific need and can be relatively expensive, not particularly portable, and require extensive training. In many cases there will always be a need for targeted technology of course, but more typically learners will exhibit a range of challenges and behaviours - they are 'neuro-diverse'. Providing technological solutions to support each behaviour could very quickly become unmanageable and cost-prohibitive unless the technology itself can address both a range of challenges and, perhaps crucially, also support the learning of each student on a more general level.

Unfortunately targeted solutions can also create a stigma for the user or be seen as a label. This is not ideal in any situation, but in a classroom, which is already a highly sensitive melting pot of behaviours and emotions, the effect can be detrimental where the aim is to improve and not detract from learning.

So wouldn't it be great if there was a stigma free device for learning that included as standard a wide range of tools that will support both learning in a general sense and challenges identified under the neuro-diverse umbrella. Furthermore, if the tools are available on the device that all learners are using and were able to cross over into the space where they support both those who have identified challenges and those who do not, then the stigma created by technological solutions may start to disappear.

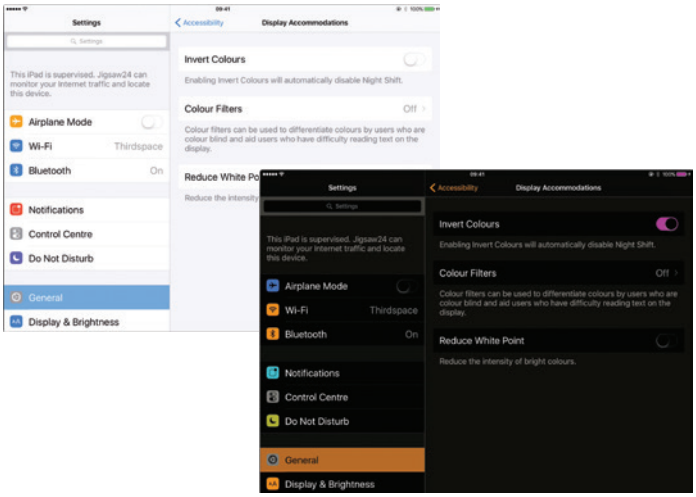
The iPad is fast becoming ubiquitous in schools. That doesn't mean simply by buying iPads that you will improve learning. In my role as an Apple Education Trainer, it has become my mission to increase awareness of the opportunities these tools give us, both to support those with identified challenges and learning in the classroom in a more general sense. It is not unusual for me to visit a school where iPads are being used for browsing the Internet with no awareness of the possibilities they present and the support they can provide. At a recent event we asked the question: 'How many of you have iPads in your school?' 180 hands went up. Then we asked 'How many of your schools are using these devices effectively?' 180 hands went down.

So in this article I would like to give you a small range of examples that show how iPad can support a classroom where learning can be reimagined, and students with a range of needs can work alongside their peers with no fear of stigma. My intention is to catch your interest, and encourage you to find out more - details at the end of the article!

Help me read

Computers traditionally display text as small fine black shapes against a bright white background. Ironically designed as an enhancement of the printed book, this format presents challenges on a number of levels. iPad contains a simple function in the Settings app

Tap (General>Accessibility>Display Accommodations) called 'Invert Colours'. This will literally swap white for black, which for some immediately makes reading more comfortable, reduces visual stress, and makes print more legible.



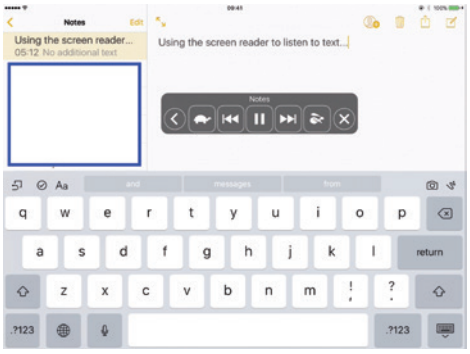
An intervention for those with forms of dyslexia and/or Irlen Syndrome has been to provide colour overlays for printed materials and computer screens. The latest version of the operating system that runs on iPads (iOS 10) now includes a feature that allows you to customise a colour overlay for the whole device. Again in the Settings app tap (General>Accessibility>Display Accommodations) simply choose your colour tint and hue and visual stress can be immediately reduced. This 'overlay' will persist in any app that you use on the iPad.

Make my iPad talk

Screen readers are a proven technology and very helpful for some. iPad contains several ways for users to make their device talk to them, from the 'light touch' to a complete voiceover feature for the visually impaired.

Enabling **Speak** Selection, in the Settings app tap, (General>Accessibility>Speech) allows the user to select specific text when required and have it spoken to them in a range of voices.

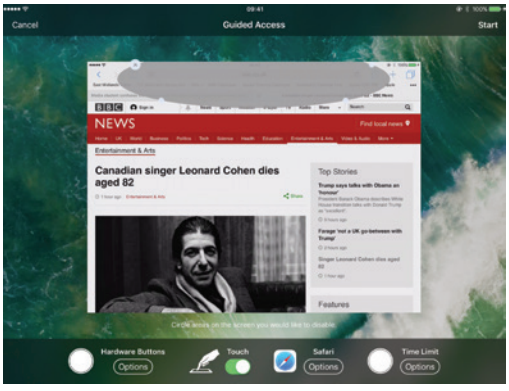
Speak Screen also found in Settings (General>Accessibility>Speech) on the other hand enables the screen reader function which is activated by simple gesture (swipe down with two fingers from the very top of your screen, once the function has been enabled in Settings.) This has many uses – aside from the obvious screen reader functions which will support those with visual challenges, this enables all learners to review their own work and check it where simply reading the words is not enough. This 'Speak Screen' function works everywhere on the iPad once enabled. Combined with the Reader function (which removes all the clutter from a webpage leaving the simple text) in the Safari web browser app for example, giving easier access to online materials for those for whom graphic and text layout create a barrier.



Help me focus

Guided Access in Settings app, tap (General>Accessibility>Guided Access) is a feature some say was originally added to iPhones to help tired parents on long-haul flights, but it is also a great feature for assisting learners who are easily distracted by the possibilities that a device like iPad offers. Enabling Guided Access allows you to lock the iPad into a single app. This means the user can stay on task, and remain in a safe environment while you're busy back is turned supporting another student.

And while Guided Access is ideal in a one-to-one intervention scenario, Apple's recent release of the classroom app means that teachers and those working with groups can focus activity on a set of devices with simple commands from the teacher's device.



Classroom is part of a recent development by Apple that also includes 'Shared iPad'. The 'accessibility' features listed above work most effectively where each student has their own device, so features can be personalised to every situation. In many schools this is simply not an option from a cost point of view, which is where Shared iPad comes in. Each shared device will recall the individual settings chosen by or for each user and recall those settings when the user 'logs in' (a simple matter of tapping your own image on the home screen).

What about apps?

Let's finish with an app. Most apps haven't been destined with accessibility in mind but many of the most popular classroom apps have achieved that status partly because of the choice they offer learners in the ways that content can be created and evidence captured, combined with their ease of use - something that is an essential for the teacher or assistant who is not necessarily technologically minded! Of course, Book Creator lets you add photos and type – but any word processor can do that. Where Book Creator scores is the ability to quickly and simply add rich media content - for example sound recordings and video recordings - at the press of a button. Learners challenged by text can easily record rich ideas without barriers. This also lends itself really well to the notion of providing instruction, recorded by teacher or student. Its page-based layout supports the clear structuring of information, and it is very easy for teacher or student to create a book comprising images and sound recordings, for example, as a way of sharing instructions or ideas. And it helps that Book Creator is designed by developers with a keen eye on the education space. A clear example is the inclusion of the Open Dyslexic Font in the font choices.

These examples are but a small selection of what is possible, both with built-in features and apps. iPad is continuing the great tradition of Macs in offering an inclusive approach to technology started back in 1984 by Steve Jobs, a man who himself didn't allow dyslexia to be a barrier to success.

Jigsaw24 have been lucky enough to work alongside Dyslexia Action as well as the British Dyslexia Association, Patoss and Helen Arkell on the recent DfE supported training 'tour', where our five minute 'taster' session presenting some of the ideas discussed in this article have met with excitement and enthusiasm. If you would like to know more, and get hands on with these ideas and many more, why not enrol on one of our upcoming half day courses? Venue and date details as follows:

Dates: 28th February 2017, London Piccadilly. 9am-12pm or 1pm-4pm

1st March 2017, Nottingham. 9am-12pm or 1pm-4pm

Cost: £75 per delegate

For more details and booking email:
education@jigsaw24.com

The National Dyslexia Resource Centre – a member benefit

Jan Beechey, Guild Librarian outlines some of the key library benefits available to members.

The Dyslexia Action library has many excellent resources to help you broaden and deepen your understanding of dyslexia and co-occurring specific learning difficulties (SpLD). The resources are in many hard copy formats such as, books, reports, journals, teaching resources, games and activities that are based at Egham in Surrey and available to full members through collection in person or via a postal loan service. Full members can borrow six items for three weeks at a time. For those who are suitably qualified as assessors, we offer assessment test kits for loan as a try before you buy service, as these tests are expensive. The Dyslexia Action Shop, www.dyslexiaactionshop.co.uk/ also offers a 10% discount to Guild members, a substantial saving that you can use for yourself or your employer. There is a growing collection of e-books and e-journals which our members can enjoy at any time, day or night. These can be read online or downloaded for 24 hours and you can print a chapter or 10% of the book in accordance with UK copyright law.

Quick links to the library

To access the library catalogue please use this link: https://da.koha-ptfs.co.uk/

To send the librarian your cart of items to borrow or to access e-books or journals, you will need to log in.

If you do not yet have a library login and would like a guide on how to get started on using all the library services, please email library@dyslexiaaction.org.uk

Call for book reviewers!

Would you like to review new titles for the Dyslexia Review? Get to see new titles before they hit the bookshelves? Our reviewers get to keep the book they review for us and copy deadlines are generous so if you are interested, please contact the Guild Administrator, Jan Beechey, with details of your areas of interest or expertise: guild@dyslexiaaction.org.uk

New e-book titles added to the library:

Brown, T. (2014) The really useful maths book: a guide to interactive teaching

Elliott, J. (2016) Dyslexia: developing the debate

Frederickson, N. (2015). Educational Psychology: topics in applied psychology

Gribben, M. (2012) The study skills toolkit for students with dyslexia

Kormos, J. (2008) Language learners with special needs

Oakhill, J. (2015) Understanding and teaching reading comprehension: a handbook

Pritchard, A. (2014) Ways of Learning: learning theories and learning styles in the classroom

Raymond, S. (2014) Spelling rules, riddles and remedies: advice and activities to enhance spelling achievement for all

Waugh, D. (2015) Beyond early writing: teaching writing in primary schools

Zwiers, J. (2014) Building Academic Language: meeting common core standards across disciplines, grades 5-12

If you do not yet have a library login and would like a guide on how to get started on using all the library services, please email library@dyslexiaaction.org.uk

Book Reviews

Kelly, K and Philips, S. (2016) Teaching Literacy to Learners with Dyslexia - A Multisensory Approach. 2nd Edition. London: SAGE. ISBN 978-1-4129-6218-6 RPR: £34.99 pbk

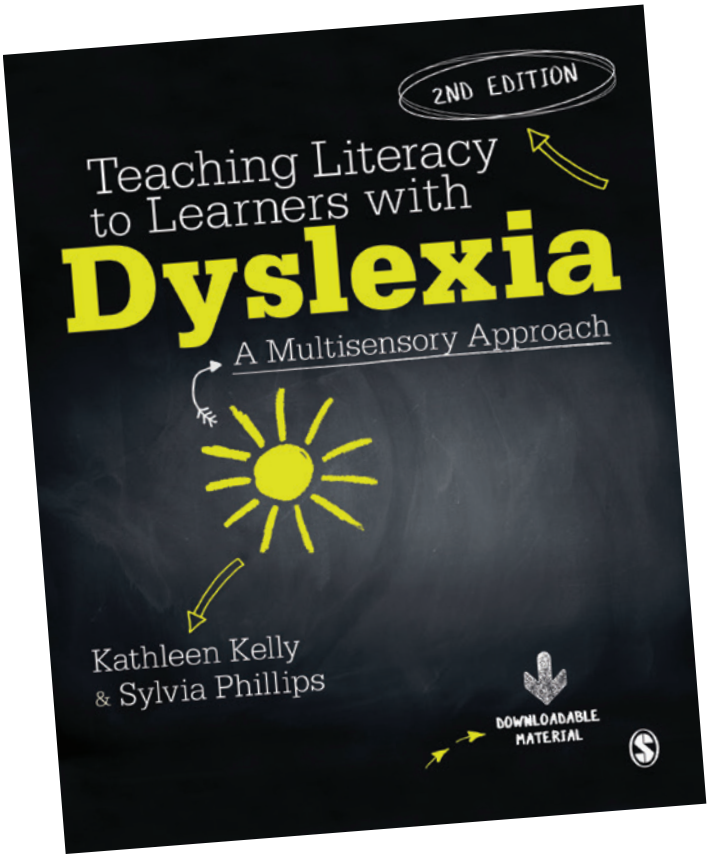
Reviewed by Katy Parnell MDG, Specialist SpLD College Lecturer and Dyslexia Action Postgraduate Tutor

Kathleen Kelly, currently senior lecturer in the Centre for Inclusion and Special Educational Needs at Manchester Metropolitan University, has long experience of teaching learners with and teachers about SpLDs. Sylvia Philips leads the specialist dyslexia teachers' course at Glyndwr University, Wales.

A cursory search on Amazon of their latest publication reveals a long list of five star reviews from practising specialist teachers and students on Level 5 and 7 courses who express their grateful appreciation for the accessible way the authors draw together research and theory in the first part of the book. There is also praise from teachers for the new flexible Conquering Literacy programme that follows on from the chapters on theory.

Teaching literacy to Learners with Dyslexia is conceived of by the authors as a core text for specialist teachers: students can quickly gain an overview of both the seminal and latest underlying biological, cognitive and behavioural theories of the causation and characteristics of dyslexia and the practical implications. Experienced practitioners will find it helpful to have the latest thinking concisely explained - over the last two decades Positron Emission Tomography (PET) and Functional Magnetic Resonance Imaging (fMRI) scans have moved some of the focus away from phonology into the complex field of neurobiology. This second edition has been updated to include the latest research while a diagrammatic Integrated Causal Model of Dyslexia helps the reader hold the multi-faceted current picture in a visual framework. As the authors point out, with a secure knowledge base it will be easier to follow future peer-reviewed articles. There is a useful chapter on working memory deficits with advice for teachers and parents, followed by sections giving a concise overview of up-to-date research into development of phonological processing skills, reading, spelling and handwriting and insights too into dyslexia and EAL learners - all with clear boxed sections on the implications for practice. It is worth noting that the programme's theoretical approach broadly harmonises with that of Dyslexia Action's Literacy Programme (DALP).

The remainder of the book comprises the authors' new Conquering Literacy Programme, based on synthetic phonics but also integrating a morphological approach. The theoretical reasoning behind the methodology links clearly to the theory covered in Part 1. It offers an accelerated route, necessitated in part by the focus on synthetic phonics in the National Primary Strategy, and is supported by downloadable placement test materials and also downloadable lesson plans (with different time lengths) and some model tracking sheets, worksheets, activities, concept cards and games. The programme



would also be appropriate for non-dyslexic learners with general learning and literacy difficulties, though the pace would need to be adjusted and there are suggestions for making adaptations to accommodate small group work. A caveat: in this programme the phonological teaching points are ordered with significant differences from DALP order and the support materials are less comprehensive.

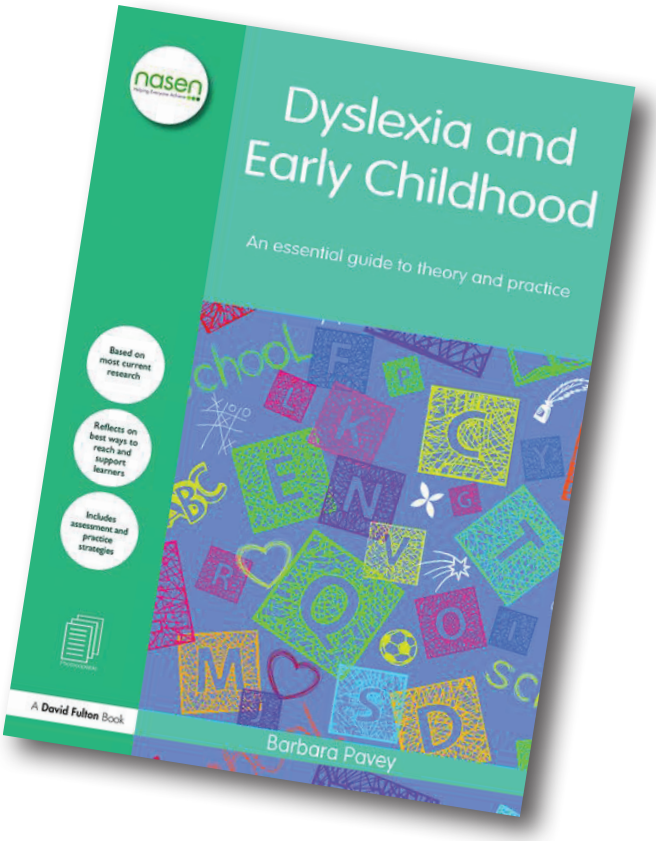
Having worked in further education I know this book will be extremely useful to lend to non-specialist colleagues on the ALS team who express an interest in finding out more about dyslexia. It will help support school SENCOs and Educational Psychologists too. This is one review copy I will be asking to keep!

Reader Offer

For 25% off this title go to www.sagepub.co.uk add the book to your basket and enter code UKEDUC25 at the checkout. This code is valid until 31st March 2017 and cannot be used in conjunction with any other offer.

Pavey, B. (2016). Dyslexia and Early Childhood: An essential guide to theory and practice. Oxford: Routledge. ISBN-978.0-415-73650-3 (hbk), ISBN-978.0-415-73652-7 (pbk), £ 21.99 ISBN-978.1-315-81844-3 (ebk)£19.99

Reviewed by Kathleen Payne, Primary, Early Years and SpLD Teacher



Barbara Pavey has produced this practical guide for all practitioners, not only those who specialise in early years, encouraging all teachers to become more dyslexia aware.

Current thinking on developmental dyslexia is that it is not exclusively language-centred and that the brain works hard in other ways in order to compensate and overcome literacy difficulties. Pavey acknowledges the complexity of dyslexia, highlighting the fact that not all those with dyslexia demonstrate phonological difficulties, thereby dispelling the idea that individuals with dyslexia are unable to read. Pavey points out, that a hidden characteristic of the condition is fatigue, which, in slowing down the reader, widens the gap between their peers and themselves.

The guide is laid out in an easy to use format. Each chapter begins with good practice points being offered which encourage practitioners to adopt and maintain dyslexia aware principles and practice and through the use of different media, help to bridge the gap in learning. Guidance is also given on the use of relevant information technology, advising adults to interact with learners when they are using various programs and applications, rather than leaving them to their own devices, in order to improve the benefits of the technology.

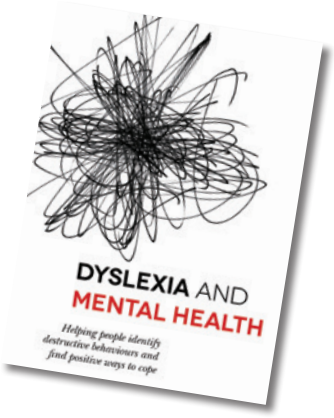
Bearing in mind that it has long been acknowledged that play is an important part of learning, suggestions for the use of various games are given, along with explanations as to how these games support learners with dyslexia. Pavey explains how the concept of play applies to young children with dyslexia, as they are able to gain freedom from the difficulties and pressures of literacy constraints, enabling some to perceive the, 'big picture', by way of following different paths through creative exploration. Pointers are given with regards to the use of: attitude, understanding, technique and empathy, in order for practitioners to develop expertise.

Recommendations for further reading and useful websites for further research are given for each chapter and along with these, an insight into what it is like to live with dyslexia. Individuals with dyslexia and their families recount situations where their difficulty has impacted upon their lives; accounts which are both poignant and thought-provoking.

Dyslexia is often identified through failure. As an Early Years and SpLD teacher, I have found this guide both informative and helpful. I am sure that it will help practitioners to understand how to be more dyslexia aware in their practice and through the use of attitude, understanding, technique and empathy it will encourage the learner and help them to become more adept teachers too.

Dyslexia and Mental Health: Helping people identify destructive behaviours and find positive ways to cope

By Neil Alexander-Passe, Jessica Kingsley Publishers 2015, ISBN 978 1 84905 582 6



Reviewed by Lois Hood MDG, Specialist Teacher Assessor, Dyslexia Action.

Alexander-Passe begins by stating 'The study of dyslexia rarely focuses on the manifestations that occur as a result of having a learning difficulty or difference.' His book sets out to address this and is an important work because it allows the reader to understand the emotional consequences of dyslexia.

The book starts with reviews by distinguished experts: Professors Maggie Snowling, Neil Humphreys, Angela Fawcett which tells the reader that this is a book that should be recognised as bringing an 'original perspective on the socio-emotional aspects of dyslexia and will be welcomed by professionals in the field', and it is 'an important and much needed book – the emotional impact of dyslexia has been neglected for too long'.

Dyslexia and Mental Health aims to not only identify destructive behaviours in individuals with dyslexia but also provide help by offering many useful tips, suggestions and key messages, so that positive ways to cope can be implemented. The first chapter looks at what dyslexia is. It considers the fact that there is still much debate in this area and this can be confusing for those who do not work in the field. These early sections are very authoritative and detailed in their information. No two people with dyslexia are the same and this can lead to confusion. It can also mean that those with dyslexia suffer because their specific challenges are poorly understood.

The book then goes on to explore what a life with dyslexia means – from early years to primary, then through secondary to adulthood. The challenges at each stage are outlined along with strategies a person with dyslexia may develop to compensate, as while they may be successful, they may also feel despair and helplessness as a result of this journey. As well as life at school and work, relationships are also considered. Social relationships are discussed as well as possible emotional problems in finding and living with a life partner. Individuals with dyslexia may be in denial of their difficulties, and frequently attempt to camouflage or even avoid them. Avoidance is a key topic in the book, the many types and reasons behind this strategy are much discussed.

The following chapters examine aspects such as labeling, accepting labels and developing a dyslexic identity. Neil Alexander-Passe argues that many individuals will hide their dyslexia in school and the workplace due to fears of bullying, discrimination or just not wanting to seem different. Successful dyslexics see their difference as a positive attribute; and by delegating the things they find hard they celebrate their strengths.

Having dyslexia can cause stress and anxiety. Neil Alexander-Passe argues that individuals with dyslexia should be realistic about what they can achieve, creating achievable/aspirational goals rather than unrealistic dreams. In school, teachers should ensure that learning situations have suitable levels of challenge and do not cause anxiety. Parents should also be aware of levels of exhaustion that can result in young children with dyslexia not coping at school; being on their guard to possible humiliation from both teachers and peers.

Other chapters look at defence mechanisms, many can help but can often also hinder. Neil Alexander-Passe considers such things as a child becoming the class clown as one unhelpful kind of defence mechanism. Children are sometimes seen as having behavioural difficulties because their dyslexia is not acknowledged or dealt with. Avoidance is a slippery slope and recognising their own difficulties can be the first step towards dealing with them. If a child is avoiding an activity in the classroom such as writing, the teacher needs to examine why. Too often the child's secondary behavioural manifestations (e.g. misbehavior) are seen as primary difficulties. Knowing that reading out loud and writing tasks will cause humiliation and anxiety, a child with dyslexia will seek opportunities to avoid such tasks by: going on errands for teachers, breaking their pencils to avoid writing, and even calling in sick to avoid class spelling tests. The teacher's role is to look behind such behaviors and seek out the child's root difficulties.

Children with dyslexia are highly vulnerable to depression, and parents/teachers should be alert to early signs of the risk of depression such as withdrawal, comfort eating, avoidance of pleasurable activities, risk-taking, sleeping too much and bed-wetting (nocturnal enuresis).

A section on 'dyslexic coping profiles' is interesting as it brings the author's and other researcher's studies together to understand how individuals with dyslexia from certain types of groups cope: school-aged children, school-aged teenagers, college students, the academically successful compared to less successful adults are all considered.

In the section on 'emotional defenses' the author looks at issues of self-harm (depression, drug/alcohol abuse, food, body injury, suicide/attempted suicide). These are difficult subjects to talk about but the author demonstrates his authority and knowledge through use of personal accounts to indicate that these are areas that are not uncommon in both children and adults with dyslexia, demonstrating why this unique book should be studied.

Each chapter finishes with a conclusion and key messages. This is very useful as some chapters are quite detailed, containing relevant detailed research reviews. Quotes from the author's research are used to illustrate sections and deliver a personable message. Key actions are suggested for those with dyslexia, teachers and parents.

The overall message of the book is that dyslexia must be acknowledged and dealt with and should be seen in a positive light. Strategies to support individuals must be found, and schools should invest in counselling services, so that the emotional effects of long-term educational failure are addressed. The book concludes that addressing literacy needs is not enough to academically develop individuals with dyslexia.

Game Review

Nubble! – Maths practice disguised as a game. Virtual Image Publishing Ltd. Nubble! CD ROM Single user licence £30+VAT Single Home user licence special offer available on website www.virtualimage.co.uk available for £15+VAT

Reviewed by Dr Joan Mushin, ADG Specialist Teacher

Nubble! does for numbers, what Scrabble does for words. Nubble! was designed as a board game, but is now produced on CDROM by Virtual Image. It is the only maths software and board game to have been awarded Millennium Product status.

Nubble comes in several variants: Nubble!, Nubble! 64, as well as Deluxe and Express versions. The highest level is based on the original game with numbers 1 to 100 in hexagonal cells arranged in a rhombus shape. The Express version for young players covers numbers from 1 to 25, while Nubble! 64 covers numbers 1 to 64.

In Nubble! 64, the players take turns to click the screen button labelled 'Throw dice'. Numbers are then randomly generated on the three 8-sided dice and the player must combine them to form a whole number using all three numbers once only. The player may multiply, divide, add or subtract the numbers. For instance, if the numbers 5, 4 and 2 are thrown, different numbers could be generated such as:

(5 + 4) x 2 to make 18

5 x 2 x 4 to make 40

(4 x 2) - 5 to make 3

The player clicks the corresponding hexagon on the board which is then covered by a counter. Points are scored depending on the colour of the hexagon covered - higher numbers scoring more points - and the players' scores are automatically totalled and visible after each turn. The aim of the game is to complete a continuous path of counters connecting hexagon 1 to hexagon 64. The player with the highest score is then the winner.

Added interest comes from bonus points which are awarded by making a Nubble! move, which is when a triangle of three adjacent numbers is formed, or a Double Nubble! scored by making a Nubble! move on to a prime number. All this is accompanied by flashing lights and sounds of dice being shaken, gaming noises, and cheering when bonuses are won.

Nubble! is a simple game, yet very versatile. Games can be played by up to four players, or in a class situation between two teams using an Interactive Whiteboard (IWB), or alternatively by a child playing on their own or against the computer. It is eminently suitable and stimulating for learners with dyslexia as there is no time pressure involved, although it is possible to play against the clock if wanted. The presentation is popular because it simulates the sort of arcade games that children like to play.

The intermediate version also comes with a head start option in which a set number of hexagons are randomly covered over at the start of the game. This means that a full game can be completed in a shorter time.

I have used Nubble 64 with a number of dyslexic learners from age eight upwards, and have found that it is effective in building confidence in maths, improving times tables and number bonds, while increasing speed of mental calculation. More than that it is enjoyable, fun and really absorbing!

Accredited Training Courses

Dyslexia Action
Taking Action • Changing Lives
Training and Professional Development

Dyslexia Action Training and Professional Development is a leading provider of specialist training courses in the field of dyslexia and specific learning difficulties for teaching and education support professionals.

www.dyslexiaaction.org.uk/educators

Continuing Professional Development Short Courses

Our six week online CPD courses aim to provide up-to-date knowledge in the field of dyslexia and literacy for professionals working in schools, colleges and other educational settings. Participants are provided with practical strategies to enhance the working environment and to enable them to put in place the support required for learners with dyslexia and specific learning difficulties. Our unit courses cover a range of related topics; three units combine to make an award and all the units contribute to a pathway leading to a Strategic Teaching Certificate.

Level 4 and 5 Topics include:

- Dyslexia and Co-occurring Difficulties
- Supporting Individuals with Memory Weaknesses
- Structured, Cumulative Multisensory Tuition
- Developing Reading, Writing and Spelling Skills in Learners with Dyslexia
- Supporting Adults with Dyslexia and Co-occurring Difficulties

Level 7 Topics include

- The Dyslexia Action Literacy Programme
- Professional Practice Award for Specialist Assessors
- Applying for an Assessment Practising Certificate

These courses are accredited by:

The CPD Standards Office
CPD PROVIDER: 50005
2016 - 2018
www.cpdstandards.com

Accredited cpd Activity

Courses run in January, March, May, July, September and November
www.dyslexiaction.org.uk/educators

Postgraduate Certificate and Diploma Programmes in Dyslexia and Literacy

This well-respected programme is designed for specialist classroom teachers and support tutors. The online course aims to develop skilled practitioners who understand both the theory and practice of teaching and assessment of dyslexic learners, of all ages. The course is flexible and is undertaken part-time.

All modules are accredited by Middlesex University London and provide a progression pathway to a Master's in Professional Practice. Courses are also accredited by the BDA (ATS/APS and AMBDA) and SASC for the Assessment Practising Certificate.

Join the Dyslexia Guild

The Dyslexia Guild is open to all individuals with a professional interest in dyslexia and literacy difficulties. The Guild aims to promote discussion, information and best practice, as well as keeping members informed of developments in the field. Benefits include designatory letters, a forum to discuss professional matters, an online library, our journal the Dyslexia Review, access to free webinars and discounted attendance at Dyslexia Action's annual conference, which will be held on 28th June 2017. Further details available soon.

Visit: www.dyslexiaaction.org.uk/membership-dyslexia-guild
Email: guild@dyslexiaaction.org.uk **Tel:** 01784 222342

Courses for Qualified Specialist Teachers and Assessors

The Dyslexia Action Literacy Programme

Developed by the Postgraduate Tutor team at Dyslexia Action this specialist literacy programme reviews current research on the development of literacy skills and introduces the practitioner to a literacy training programme that provides a flexible pathway to accommodate each learner's literacy profile.

Professional Practice Award for Specialist Assessors

A suite of three units designed to enable specialist assessors and teachers to explore assessment and teaching intervention processes in depth. Each unit features theoretical input, a series of practical activities and a reflective element to drive practitioners to a constructive self-evaluation of their own professional practice.

Applying for an Assessment Practising Certificate

An Assessment Practicing Certificate (APC) is a licence to practise for those carrying out assessments in schools for Exam Access Arrangements and in colleges for the Disabled Students' Allowance.

These courses are suitable for those looking to gain or renew their APC and provide approved recognition that the holder has the experience and competence to undertake diagnostic assessments and reports.

Further Information

Visit: www.dyslexiaaction.org.uk/educators
Email: trainingcourses@dyslexiaaction.org.uk | **Tel:** 01784 222 304

www.unitsofsound.com

UNITS OF SOUND
Literacy for life.

Units of Sound is an online, second chance, literacy development programme designed to teach reading and spelling from Key Stage 2 through to adults. Students can log on from home, at school or anywhere with internet access.

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- Separate placement tests for reading and spelling
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- Recording to enhance phonological loop
- Online training for teaching staff

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Email: hmaclellan@dyslexiaaction.org.uk
or contact us via the contact form at www.unitsofsound.com

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